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\$	YY Y			AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB	LL LL LL LL LL LL LL LL LL LL LL LLLLLL	EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE	••••
MM MM MMM MMM MMMM MMM MMMM MM MM MM MM	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	RRRRRRRR RRRRRRRR RR RR RR RR RR RR RRRRRR						

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ENVIRONMENT: prefix file

AUTHOR: Ken Henderson CREATION DATE: 15 Feb 1983

MODIFIED BY:

V03-011 CWH3011 CW Hoobs 24-Jul-1984 Add WS\_OPAO bit, workstation using QVSS console.

V03-010 WMC0003 Wayne Cardoza 2-Feb-1984 Need at least one bit set in PAGEFILE\_PAGE

V03-009 WMC0002 Wayne Cardoza 31-Jan-1984 Add emulated instruction flags.

V03-008 WMC0001 Wayne Cardoza 01-JAN-1984 Add page and swap file data.

V03-007 KFH0006 Ken Henderson 18 Aug 1983 Change SCS\_EXISTS to boolean Changed SID back to DECNUM

V03-006 KFH0005 Ken Henderson 28 Jul 1983 Add SCS\$GA\_EXISTS, delete SERIAL, MFGPLANT, HWREVISION, ALLOCLASS and the login security params

V03-005 GAS0142 Gerry Smith 23-Jun-1983 Add ALLOCLASS, and the login security parameters

SYITABLE.MAR;1

16-SEP-1984 17:07:55.01 Page 2

V03-004 KFH0004 Ken Henderson 16 Jun 1983 Changed SID to HEXNUM, NODE\_AREA and NODE\_NUMBER to 4 bytes long.

V03-003 KFH0003 Ken Henderson 21 May 1983 Added cluster item-codes.

V03-002 KFH0002 Ken Henderson 8 Mar 1983 Added BOOTTIME item-code.

V03-001 KFH0001 Ken Henderson 22 Feb 1983 Added SERIAL, MFGPLANT, and HWREVISION item-codes.

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## ABSTRACT:

SYI\_ITEMTABLES macro

This macro expands to generate multiple calls to the SYI ITEM CODE macro, which must be previously locally defined in the module which invokes SYI\_GENERATE\_TABLE. The SYI\_GENERATE\_TABLE macro calls SYI\_ITEMTABLES once - to define the GETSYI item-codes that are Not SYSBOOT parameters.

The parameters that are passed to the SYI\_ITEM\_CODE macro follow:

BASE determines which EXE\$GETSYI table to use. It's tables correspond roughly to the source of the data. The legal parameter values here are: EXE, FLD

NAME

is the name of the SYS\$GETSYI item-code.
The legal parameter values here are determined by the \$SYIDEF macro (in EVMSLIB.SRC]STARDEFQZ.SDL).

SOURCE is either an address of a cell, or a processor register number (as determined by the BASE parameter).

DTYPE is both a datatype and a usage indicator.
The legal values and examples for this parameter follow:

(CTL\$GQ\_LOGIN) (PCB\$L\_UIC) 64 bit time user ID code STDTIM STDUIC (CTL\$AQ\_EXCVEC) (CLUB\$B\_FSYSID) HEXNUM hex number HEXSTR hex string DECNUM (PCB\$L BYTLM) decimal number PRVMSK (PHD\$Q\_PRIVMSK) privilege mask (CTLSGE\_IMGHDRBF) (PCBST\_TERMINAL) STRDSC string descr CNTSTR counted string (JIB\$T\_ACCOUNT) (PCB\$L\_STS) (JIB\$V\_TERMDIAL) **PADSTR** blank padded str BITVEC bit vector BITVAL boolean quantity

BITPOS is the bit position for FLD data items.

BITSIZ is the bit size of FLD data items.

OUTLEN is used by EXE\$GETSYI in fetching information (number of bytes).

	BASE.	NAME,	SOURCE,	DTYPE,	BITPOS,	BITSIZ,	OUTLEN
	: 64-b	it abs. system at EM_CODE -	system boot				
	EXE,	BOOTTIME,	EXE\$GQ_BOOTTIME	, STDTIM	. 0.	0,	8
	; soft SYI_IT EXE,	ware version numb EM_CODE - VERSION,	er SYS <b>\$</b> GQ_VERSION,	PADSTR,	0.	0.	8
l	: syst	em ID register					
	EXE,	EM_CODE = SID,	PR\$_SID,	DECNUM,	0.	0.	4
ļ	: tota	l nodes in cluste EM_CODE -					
	EXE,	CLUSTER_NODES,	CLUB\$W_NODES,	DECNUM,	0,	0,	2
l	SYI IT	l votes in cluste EM_CODE -					
	EXE,	CLUSTER_VOTES,	CLUB\$W_VOTES,	DECNUM,	0.	0.	2
1	SYI IT	<pre>l quorum in clust EM_CODE +</pre>					
	EXE,	CLUSTER_QUORUM,	CLUB\$W_QUORUM,	DECNUM,	0,	0,	2
	SYLIT	ding system id EM_CODE -					
	EXE,	CLUSTER_FSYSID,	CLUB\$B_FSYSID,	HEXNUM,	0.	0,	6
	; found	ding boottime EM_CODE -			_	_	_
		CLUSTER_FTIME,	_	STDTIM,	0,	0,	8
1	SYI_ITI	ter membership st EM_CODE -			•	•	•
EXE,	CLUSTER_MEMBER,	CLUSGL_CLUB,	BITVAL,	0,	0,	1	
	BASE,	NAME,	SOURCE,	DTYPE,	BITPOS,	BITSIZ,	OUTLEN
	: CSID	of target					
	ŠYI_ITI EXE,	<pre>of target EM_CODE =    NODE_CSID,</pre>	CSB\$L_CSID,	HEXNUM,	0,	0,	4
	; vote	s of target	<b>-</b>	·			
	SYI_IT	EM_CODE = NODE_VOTES,	CSB\$W_VOTES,	DECNUM,	0.	0,	2
	: guọt	um of target					
	EXE.	RODE_QUORUM,	CSB\$W_QUORUM,	DECNUM,	0.	0.	2
1							

SYITABLE.MAR;1		16	-SEP-198	34 17:07:	:55.01
; system id of target SYI_ITEM_CODE - EXE, NODE_SYSTEMID, S	B\$B_SYSTEMID,	HEXSTR,	0.	0,	6
; decnet area of target SYI_ITEM_CODE = FLD, NODE_AREA, S		DECNUM,	10,	6,	4
: decnet number of target SYI_ITEM_CODE - FLD, NODE_NUMBER, S	B\$B_SYSTEMID,	DECNUM,	0.	10,	4
S/W incarnation of targ SYI_ITEM_CODE - EXE, NODE_SWINCARN, S		HEXSTR,	0,	0,	8
S/W type of target SYI_ITEM_CODE - EXE, NODE_SWTYPE, S	B\$T_SWTYPE,	PADSTR,	0,	0,	4
: S/W version of target SYI_ITEM_CODE - EXE, NODE_SWVERS, S	B\$T_SWVERS,	PADSTR,	0.	0,	4
: H/W type of target SYI_ITEM_CODE - EXE, NODE_HWTYPE, S	B\$T_HWTYPE,	PADSTR,	0.	0,	4
; H/W version of target SYI_ITEM_CODE - EXE, NODE_HHVERS, S	B\$B_HWVERS,	HEXSTR,	0.	0.	12
<u> </u>	B\$T_NODENAME,	CNTSTR,	0.	0.	16
; Architecture flags SYI_ITEM_CODE - EXE, ARCHFLAG, E SYI_ITEM_CODE - FLD, CHARACTER_EMULATED,	XE\$GL_ARCHFLAG,	BITVEC,	0,	0,	4
SYLITEM_CODE =	EXE\$GL_ARCHFLAG	, BITVAL	. ARC\$V	DCML_EM	JL, 1, 1
SYI_ITEM_CODE -   FLD, F_FCOAT_EMULATED,   SYI_ITEM_CODE -	EXESGL_ARCHFLAG	, BITVAL	, ARCSV	FFLT_EMU	JL, 1, 1
SYI_ITEM_CODE - FLD, H_FCOAT_EMULATED,	EXESGL_ARCHFLAG			_	
; Workstation flags SYI_ITEM_CODE - FLD, WS_DPAO, E	XE\$GL_WSFLAGS,	BITVAL,	EXE\$V_0	DPAO, 1,	1

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16-SEP-1984 17:07:55.01 Page 6
SYITABLE . MAR; 1
BASE, NAME,
                                     SOURCE,
                                                              DTYPE, BITPOS, BITSIZ, OUTLEN
: CPU type
SYI_ITEM_CODE -
FLD, CPU,
                                                             DECNUM PR$V_SID_TYPE, PR$S_SID_TYPE, 4
                                     PR$_SID,
; flag to show whether SCS is loaded SYI_ITEM_CODE - EXE, SCS_EXISTS, SCS$GA_EXISTS
                                    SCS$GA_EXISTS, BITVAL, 0,
                                                                                      0,
                                                                                                  1
: Total size of page files

SYI_ITEM_CODE -

EXE, PAGEFILE_PAGE, 4+0,
                                                                                      0.
                                                              DECNUM, O,
                                                                                                  4
: Total size of swap files
SYI_ITEM_CODE -
EXE, SWAPFILE_PAGE, 4+1,
                                                                                      0,
                                                              DECNUM, O,
: Free pagefile pages
SYI_ITEM_CODE -
EXE, PAGEFILE_FREE, 4+2,
                                                              DECNUM, O,
                                                                                      0,
; free swapfile pages
SYI_ITEM_CODE -
EXE, SWAPFILE_FREE, 4+3,
                                                              DECNUM, O,
                                                                                      0,
```

.ENDM

SYI\_ITEMTABLES

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